

## AAPCO August 16<sup>th</sup>, 2022 EPA-OPP Minutes

On August 16, 2022, EPA met with state lead agency representatives to discuss the 2022 dicamba growing season organized through the American Association of Pesticide Control Officials (AAPCO) (<https://aapco.org/>). In October 2020, EPA published registration decisions for over-the-top dicamba registrations with new, enhanced control measures. EPA expected these measures (an added volatility reducing agent, cut off dates, and additional buffers) to mitigate issues seen in the past. EPA solicited feedback from the state officials attending this meeting regarding 2022 incident observations and trends, compliance with and efficacy of control measures on the current label, discussion of whether different cutoff dates or temperatures would be (or have been) beneficial in both addressing incidents and allowing for an effective weed control program, and any data or information relevant for EPA. Representatives from Alabama, Arizona, Arkansas, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, and Virginia participated in the discussion. Individuals representing each state and their organizational affiliation are provided in the regional notes below.

Pat Jones (North Carolina Department of Agriculture, AAPCO President) and Amy Sullivan (AAPCO secretary) organized the conversation by region, giving each state the opportunity to speak. After all the regions had provided the initial information that EPA asked for, there was an open dialog period when EPA and state representatives asked additional questions of one another. States reported a variety of experiences, varying from seeing no issues to state enforcement staff being overwhelmed by incidents. Alabama, Arizona, Delaware, Florida, Maryland, New York, North Carolina, Oklahoma, Pennsylvania, South Carolina, Virginia, and Texas have not had many incident complaints involving over-the-top (OTT) dicamba this year. Indiana, Kansas, Michigan, Ohio, and South Dakota have continued to have incidents on par with previous years. Kentucky was the only state to have an increased number of incidents compared to prior growing seasons. While Arkansas, Illinois, Iowa, and Nebraska have had decreased incidents compared to the 2021 growing season, all four states continue to have more dicamba incident complaints in the 2022 growing season than the total number of complaints they typically saw before 2016. Minnesota, Missouri, North Dakota, and Tennessee have had a decrease in the number of incidents compared to the 2021 growing season. Even at their reduced numbers, dicamba cases in some states still make up more than all other active ingredients incidents prior to the dicamba over-the-top registration. Some states (Illinois, Indiana, Iowa, Minnesota, Nebraska, and North Dakota) thought the decrease in complaints was related to later planting that prevented growers from applying OTT dicamba post-emergence; weather, such as high winds in June, that prevented dicamba applications; or rain that helped damaged soybeans recover this growing season. Many states indicated that these reports were likely an undercount of the actual number of incidents because damage is visible in fields at a frequency that does not match the incident counts. Michigan is considering performing an anonymous survey to better understand underreporting and why it happens. There was some discussion around the increased concentration of dicamba seen on damaged plants during this growing season. This could be due to increased concentrations being sprayed to counteract resistance in weeds or due to increased acreage being sprayed compared to prior growing seasons. Concerns around the availability of 2,4-D and glufosinate this year may have contributed to more applicators applying dicamba.

Arkansas, Indiana, Illinois, Iowa, and Minnesota had additional state specific restrictions beyond the federal label. Arkansas included additional buffers, a glyphosate tank mix restriction, and additional record keeping requirements; however, those restrictions were subject to litigation throughout the growing season. Indiana imposed an earlier cutoff date of June 20 and had fewer incidents but attributed that to fatigue and community planting. Illinois has had additional state restrictions for the past two growing seasons including a temperature cut off, an earlier cut off date on June 20, mandatory consultation of the FieldWatch sensitive crop registry, and no application if the wind is blowing towards residential areas or Illinois Nature Preserve Commission sites. Illinois and Indiana has fewer incidents of dicamba damage this growing season than the previous one, though the additional state specific restrictions were in effect both years. Iowa also had an earlier cutoff date and saw as much as a 24% reduction in incidents, though they still received double the number of OTT dicamba incidents versus those seen in pre-OTT dicamba years for the total of all pesticide incidents. Extension specialists did receive a lot of calls asking for the date to be extended, and they received a similar number of calls asking for a ban on dicamba. Minnesota implemented an 85-degree cut off and an earlier cutoff date for the southern half of the state. Incidents were down this year but based on late planting and the early cutoff date, many growers couldn't use dicamba at all this growing season. Growers expressed anger about not having time to use dicamba. Despite the earlier cutoff date, there were still more cases in the south of the state than in the north.

As was reported previously, many growers are hesitant to report on their neighbors and potentially damage relationships. Many state representatives stated that if the grower cannot determine where the damage originated then many growers believe there is no point in reporting. Growers reporting incidents have expressed frustration and anger. Following the AAPCO-EPA call, EPA learned that the farmer heard that their report had been reported to EPA, but, upon investigation, neither Headquarters or Region 7 had a report from the registrant regarding the dicamba incident. When asked, the registrant said that it would be included in their forthcoming annual report. Frustration among growers was reported by more states and reported to have increased this growing season. Several State Agencies reported resource issues attributed to dicamba incidents, such as not having the resources to perform normal spot checks or use observations as all their time is taken up by dicamba investigations. Several states reported during the AAPCO call that they do not have the resources to investigate all of the incident reports they are receiving and that farmers are discouraged by the lack of apparent repercussions. Because of the difficulty in proving what happened to cause the damage, enforcement is a challenge. Many repercussions are a warning letter or citation for improper record keeping, which many damaged growers find unsatisfying. While commercial applicators seemed to follow all the restrictions, there were reports that private applicators were more likely to apply after the cutoff date.

### **EPA Welcome**

Ed Messina (Director of Office of Pesticide Programs) opened the meeting and thanked participants for joining. He provided a brief summary of the current dicamba over-the-top registrations. In October 2020, EPA published a registration decision that included registration actions for three products approved for use on dicamba-tolerant cotton and soybeans. The 2020 registrations were granted for a period of 5 years. No national changes have been made from that registration; however, MN and IA incorporated state-specific restrictions into the registration. He requested feedback from the AAPCO members on how the labels are working in the second growing season and expressed concerns

about news reports which the Agency has been tracking. Ed Messina explained that the dicamba litigation is still ongoing and that EPA filed a status report related to Center for Biological Diversity v. USEPA as required by the Court on May 16, 2022 explaining that it has implemented state-specific restrictions in certain states and reiterated that it remains committed to working with states that are interested in addressing issues related to incidents in their jurisdictions, that an amendment request had been submitted by Bayer to add additional restrictions in all counties in which federally listed endangered or threatened plant species are located, and that additional amendments from other registrants could be submitted.

In addition to these specific OTT registrations, Ed Messina shared that all dicamba products are in registration review and recommended that AAPCO members take advantage of the opportunity to comment on all documents published for public comment, including the risk assessments. The draft risk assessment was published to the docket two days following the meeting. Prior to the meeting, EPA had sent questions disseminated through the AAPCO President that fall into 3 categories: incident trends, feedback on cut off dates, and effectiveness of the new label in terms of performance, compliance, and mitigations. Ed expressed that EPA welcomes any feedback overall as well as on these topics and that this was an opportunity to give a bigger picture characterization of the dicamba growing season.

### **State Specific Reporting**

#### **Region 2:**

In Region 2, there was representation from New York. There was no official from New Jersey present. Scott Menrath reported that there had not been any dicamba incidents in New York this year.

#### **Region 3:**

In Region 3, there was representation from Delaware, Virginia, Maryland, and Pennsylvania. There were no officials from West Virginia present. Chris Wade (Delaware Department of Agriculture) reported three total dicamba incident investigations; two were minor incidents and one larger ongoing investigation where they suspect the applicator applied a non-OTT dicamba product. Liza Fleeson Trossbach (Virginia Department of Agriculture and Consumer Services) reported that there was one likely dicamba related complaint in Virginia and that the investigation had just started. Kelly Love (Maryland Department of Agriculture) stated there were no issues in Maryland to report. Don Gilbert (Pennsylvania Department of Agriculture) reported two OTT dicamba cases that are currently under investigation: one using Engenia and one non-OTT dicamba product applied over-the-top.

#### **Region 4:**

In Region 4, there was representation from Florida, Kentucky, North Carolina, South Carolina, Tennessee, Alabama, and Georgia. There were no officials from Mississippi present.

Kelly Friend (Florida Department of Agriculture and Consumer Services) had no dicamba complaints or cases to report.

Mike Williams (Kentucky Department of Agriculture) reported that Kentucky has received 34-35 dicamba complaints, more than usual, this year. In Western Kentucky, when double crop soybean

growers were spraying dicamba, the end of June, was hot at around 95-100 degrees and windy. Mr. Williams stated that 60 acres of burley and 85 acres of dark fire tobacco had been damaged in two incidents, and there were a handful of calls relating to trees and other plants being damaged, but most of the reports were damage to non-dicamba tolerant soybean. There was at least one case of applicators not taking the mandatory training and some suspected applications after the cutoff date. Mr. Williams has also received reports of growers attempting to buy OTT dicamba products after the cutoff date, but retailers refused the sale.

Sydney Ross (North Carolina Department of Agriculture and Consumer Services) reported that there were no dicamba investigations this year. Tim Drake (Clemson University, South Carolina) reported that there were no dicamba incidents and no investigations this year.

Chad Hayes (Tennessee Department of Agriculture) reported 9 confirmed, official over-the-top dicamba cases between the end of June and the first two weeks of July. Three of the instances were sprayed after the cutoff date. However, Mr. Hayes shared that symptomology was visible on all non-dicamba tolerant soybeans in West Tennessee, including on edamame. Growers had chosen not to file complaints of dicamba damage for investigation, but the damaged soybeans had been examined.

Kristen Lashley (Alabama Department of Agriculture and Industries) reported one minor incident of dicamba damage in Alabama. Jennifer Wren (Georgia Department of Agriculture) reported that there was only one case of dicamba damage that occurred very recently and had received a lab result positively detecting the presence of Engenia.

## **Region 5**

In Region 5, there was representation from Illinois, Indiana, Michigan, Minnesota, and Ohio. There were no officials from Wisconsin present.

Brad Beaver (Illinois Department of Agriculture) shared that Illinois had received 113 complaints of dicamba damage, which is down from prior years. One reason for having fewer incidents reported this year may be rain causing sufficient recovery from damage in some areas. Illinois added state specific restrictions to dicamba use for the 2021 and 2022 seasons, most notably including a June 20<sup>th</sup> cutoff date and an 85 degree temperature restriction. Southern Illinois had several severe cases of dicamba damage and other pockets where the soybeans recovered after receiving significant rain. Mr. Beaver is currently investigating cases of dicamba applications after the cut off date.

Dave Scott (Office of Indiana State Chemist) reported that incidents of dicamba damage from the 2022 season were about the same as last year: 74 this year compared to 84 the year before and 197 in 2019. Indiana has had a June 20 application cutoff date for the past three years. The experience in Indiana has been the same as in Southern Illinois and in Kentucky with high temperatures in early June. Indiana did not have a temperature cutoff so that could have been a factor in the number of incidents they saw this year. Anecdotally, a lot of the examined symptomology looked to extension specialists like volatility rather than drift. Many soybeans in Indiana are damaged and do not look good currently, likely because the dry weather has prevented the soybeans from bouncing back like they would if there was more rain. Mr. Scott stated that they might consider a temperature cut off in the future.

Brian Verhougstraete (Michigan Pesticide and Plant Pest Management Division) reported that Michigan has received 8 complaints of dicamba damage and most of those had come in during the previous two and a half weeks, so they were early in the investigations. This is a fairly average year of reporting for Michigan. Mr. Verhougstraete reported seeing and hearing more frustration this year; growers are tired of their crops being damaged. Some growers had damaged crops several years in a row and finally filed a complaint this year after several years of trying to work it out directly with their neighbors. Many growers are still frightened of filing complaints of dicamba damage because they don't see any point and do not want to have an angry neighbor. Michigan did not include any additional restrictions this year. There is an effort underway to put out an anonymous survey to get a better handle on the extent of the damage and why people are choosing to report or not report damage. Anecdotally, they are seeing a lot of damage when driving down the road and some is likely due to applications after the cutoff date or due to the weather. Frustration was reported to be at an all-time high.

Stephanie Ende (Minnesota Department of Agriculture) reported that this year's dicamba case count of 22 was lower than last year's reported cases of dicamba damage (127). Minnesota worked with the OTT dicamba registrants to include state specific restrictions on product labelling including a June 12 cut off date for southern Minnesota and a temperature cut off of 85 degrees for the entire state. Temperatures higher than 85 degrees lead to an uptick in complaints of dicamba damage but the enforceability of a temperature cut off is unclear. There have not been additional complaints in the past week, but half of the complaints included an alleged application after June 12, but these are still under investigation. The planting for this season was very delayed, so that by June 12 a lot of the soybeans were still being planted and it was too early to spray dicamba.

Matt Beal (Ohio Department of Agriculture) reported that Ohio had received 15 dicamba complaints which mostly came in right around the cut off date in early July. Driving down the road in Ohio, issues are visible in the fields but for whatever reason, they are not being reported.

## **Region 6**

In Region 6, there was representation from Arkansas, Oklahoma, Texas. There were no officials from Louisiana or New Mexico present.

Susie Nichols (Pesticide Division Arkansas State Plant Board) reported 180 complaints. In addition to the federally mandated June 30 cut off, Arkansas required additional buffers for research stations, specialty, sensitive, or organic crops and disallowed glyphosate tank mixing. Arkansas provides monthly reporting to EPA and is happy to share any additional information that they have.

Ryan Williams (Oklahoma Department of Agriculture, Food, and Forestry) reported one complaint of dicamba damage on some ornamental species where the – XtendiMax burndown application occurred directly across the road from the damaged plants.

Perry Cervantes (Texas Department of Agriculture) reported 5 total complaints of dicamba damage in Texas. Two were to vineyards, two to non-dicamba tolerant cotton, and one on a residential

property near cotton fields. Texas experienced some issues with draught this year and had fewer complaints than last year. However, they generally consider themselves lucky given amount of cotton grown in the state.

## **Region 7**

In Region 7, there was representation from Iowa, Kansas, Missouri, Nebraska.

Gretchen Paluch, Ph.D. (Iowa Department of Agriculture and Land Stewardship) reported 160 alleged complaints of dicamba damage under investigation this year compared to 210 complaints at this point last year. Iowa has an earlier cut off than the previous years on June 20<sup>th</sup>, which was added through product labelling. This year had a slow start to planting. Dr. Paluch received calls from applicators asking for an extension of the cut off date and calls from others asking to have the products banned all together. Most the complaints and investigations this year are for damage to non-dicamba tolerant soybeans from post-emergent/over-the-top uses. The geographical trends are a little different from last year: this year more calls are coming from the southeast and southwest of Iowa, while last year more complaints were from more northern areas of the state. It is noticeable that the map of complaints is consistent with the map of rainfall: moisture appears to be a significant factor. Early in the season, growers called to inquire about herbicide supplies and what was likely to be available; so far, there have been no reports of dicamba supply issues. Iowa did not include a temperature cut off this year.

Kelly Navinsky-Wenzl (Kansas Department of Agriculture) updated the Agency that all of their pending dicamba cases are still open to investigation, and there are not any confirmed results yet. Kansas received 41 total dicamba cases, though 16 of those were anonymous tips without enough information to investigate. Most complaints were of drift onto soybeans, but one was related to cotton. Four of the complaints were made in June, 29 in July, and eight complaints had been made so far in August.

Kory Hubbard (Missouri Department of Agriculture) reported that Missouri has received 34 dicamba complaints, mostly in July, but all the investigations are still open. Most of the impacted species were non-dicamba tolerant soybean. Missouri did not have any additional restrictions beyond the federal label. The trend of complaints is downward since there were 50 last year and over 100 the year before. The decrease in complaints may be related to some of the larger producers all using the same technology (dicamba) this year and impacted growers experiencing complaint fatigue.

Tim Creger (Nebraska Department of Agriculture) reported to EPA that Nebraska has had 77 dicamba complaints, 19 of which are actively under investigation. 63 of the complaints are to soybeans, 14 were to urban or fruiting trees, nine were to gardens or vegetables (mostly residential gardens but some were commercial vegetables), and one 11-acre vineyard that has been damaged every year. This year the vineyard showed extremely high concentrations of dicamba (up to 350ppb) on the grapes despite the closest dicamba application that they are able to find is over two miles away. Frustration and angst are high among the damaged growers. There have been some reports of a couple dozen applications after the cutoff date, but people are unwilling to officially report the applications or give information that would help with an investigation, thus preventing an investigation from occurring. Nebraska received one report that a grower had pressed the registrant hard to report the damage that

he believes is volatility. Much like other states, Nebraska had seen issues with drought magnifying the effects of damage.

### **Region 8:**

In Region 8, there was representation from North Dakota and South Dakota. There were no officials from Colorado present.

Eric Delzer (North Dakota Department of Agriculture) reported that it has been a pretty good year with consistent rain throughout most of the season. It was a really late planting this year that went well into the third week of June. There were four confirmed cases of dicamba damage and five alleged cases that tie back to a single application.

Tom Gere (South Dakota Department of Agriculture) stated that South Dakota had 10 incidents of dicamba damage, compared to 16 last year and 18 the year before. Mr. Gere echoed the comments from Nebraska that growers who planted non-dicamba tolerant soybean are concerned and frustrated. Some growers planted both non-dicamba tolerant and dicamba tolerant soybeans in an attempt to protect their crops. A major seed company who sells both types of seed reported to Mr. Gere that 800,000 to one million acres of non-dicamba tolerant soybeans in South Dakota are displaying cupping. There have been several calls about symptomology in residential gardens and the concentrations of those sampled have been higher than in the past. There have also been reports of applications after the cut off date.

### **Region 9**

In Region 9, there was representation from Arizona. Jack Peterson (Arizona Department of Agriculture) had no dicamba incidents to report but expressed interest in the registrant reporting requirements.

### **Open Discussion and Follow Up Questions**

Extension specialist expressed interest in the registrant reporting requirements, so EPA explained that under 6a2, registrants are obligated to tell us if they have incidents or get unusual results on studies. EPA has tried to clearly define what an incident would be (10% cupping) and should be hearing about these incidents from the registrants. They do provide reports to EPA about what they hear through their channels, but EPA doesn't know what no one tells us.

The representative from Arkansas asked if the manufacturers need an official incident filed to the state before they could submit a report to EPA. EPA clarified that an incident number is not required to file with the company or EPA. After publishing "Status of Over-the-Top Dicamba: Summary of 2021 Usage, Incidents and Consequences of Off-Target Movement, and Impacts of Stakeholder-Suggested Mitigations," which included a collation of everything EPA had heard previously from states, registrants, and other stakeholders, some people claimed there was double counting. EPA attempted to remove duplicate incident reports from our counts in this report where information to do so was available and

does not believe that a significant number of the reports are double counted. If they have an incident number, EPA will accept it as a further measure to avoid double counting, but companies can use their own numbering identification system, and they do not need to wait for a state report to be filed to report to us.

The representative from Nebraska asked if there is any requirement on the registrant about what specific kind of information they need to collect for their report or if there are any specific field investigation requirements. EPA responded that at least one company claims they investigate everything, so the reports should be both phone calls and investigations based on the information we have received at this time. The representative from Iowa clarified that the registrant should report an incident if there is 10% cupping and if there is a document that the states can provide to growers or callers regarding that requirement.

EPA stated that it is part of a letter sent to the registrants that is available in the public docket. The intent in the specifications was to make requirements very clear so no incidents are missed or claimed to not be an incident. EPA shared the 6(a)(2) letter with attendees. There are three levels of reporting requirements for the registrants: 6(a)(2) legal language, anything in registration notice itself, and then in 6(a)(2) letters directly from EPA to registrants clarifying and reminding registrants about what their reporting requirements are. The representative from Indiana shared that it has been over 3 years since any growers have contacted registrants for anything because 2017-2019 reporting was perceived to be so wildly unsuccessful. This is the first he's heard of the 10% guidance. If growers knew there was that type of precise measurement occurring then they might be more willing to report. He thinks it is unlikely that registrants are doing any field truthing. It's possible in Indiana that some planting was so late, it would have been burndown instead of OTT. Hopefully, that's not the only reason for Indiana's low numbers. The AAPCO president shared that he remembered the discussion of whether cupping counted and is pleased to see the 10% number that the Agency shared.

EPA requested additional information regarding dicamba damage to edamame fields that were discussed and other non-soybean species. The representative from Tennessee stated that when you drive in certain areas, it's clear which soybeans are dicamba-tolerant and which are not because of the cupping. Mainly the damage is to non-dicamba tolerant soybeans. In some areas, you can drive around and see ornamental trees and sycamore trees are cupped.

EPA asked a series of questions about enforcement in the states. In the past there have been two tiered reports: growers who call to express frustration but not asking for enforcement and those seeking enforcement. Are the numbers offered today official investigation requests? EPA is not as close to the oversight role, but one point made in the weed scientists meeting this year is that they're pretty sure the number of incidents is going down, but the decline is more attributable to the fatigue and frustration than reduced incidents. How is enforcement going this year? Have your departments recovered from COVID restrictions and slowdowns? Is it hard to keep enforcement personnel on this case? Can you speak to how you are staffing and what the timelines are of the cases?

The North Carolina representative shared that in Region 4 states, the field staff has been up and running post covid at regular speed. It takes several months to get investigation results from the lab, and closing a case takes up to one year to a year and a half. Once a report is filed with the state, an investigator is on the scene within the next day or two after the incident is reported.



The Iowa representative had noticed an increase in investigations going back to 2017, but there has not been an increase in the number of staff. As caseloads continued to increase, there was only so much they could take on before it overloaded, and continues to overload, the system. The staff have more work than they have the ability to get done and that continues. There have been requests and discussions about whether to continue with the same type of follow up as the investigators performed prior to 2019. Growers expect the same type of investigation, but the state hasn't rebalanced the staff and investment to match the workload.

In annual reports to the regional office for past 5 years, the Nebraska representative has reported that the pesticide inspectors cannot do other routine inspections, only 25% of the WPS inspections, and no container/containerment inspections. All other nonagricultural complaints are put off until the fall/winter when any evidence is gone, severely hampering the investigation. He is not sure that they should prioritize dicamba cases when it's so hard to prove where the damage originated from, and then the result is a warning letter rather than a penalty. So far, they are able to keep up, but only because fewer growers are willing to participate in full investigations. If they fully investigated every complaint, they would not be able to do it all and would likely lose many inspectors to burnout.

The representative from Arkansas agreed with both prior speakers. Prior to 2017, the understanding was that anything FIFRA related had to be investigated and every investigation was an official investigation. Since dicamba incidents have increased, this is a can of worms based on staffing and trying to get the appropriate information with the resources they have available. If there's no formal investigation paper trail, then where does the state bill the time taking the complaints that people do not want fully investigated? What does it help to take reports of complaints but not do full investigations? The states don't know how to handle this and want guidance.

The AAPCO secretary had an opportunity recently to review grants around worker protections. One of the applications in a high dicamba incident state discussed the lack of enforcement of Worker Protection Standards (WPS) because the enforcement programs were struggling with resource constraints and other priorities taking precedence. They couldn't rely on the state because the state is overwhelmed and can't investigate WPS cases.

EPA clarified that it was our understanding that the AAPCO survey questions about incident reports include both official and unofficial reports. By unofficial, it means the complainant just wanted to say what happened, but doesn't want to file a report, have the state agency do anything, or investigate, but just wanted the state agency to know.

The representative from Indiana shared that they cannot do full investigations for everything, and sometimes just do a sample and verify that the field was affected by dicamba. They have been proceeding that they should be paid by EPA to do less than full investigations. Going out and verifying that dicamba was used on the field, even if can't determine if product was used illegally or legally, counts as billable to EPA. However, from a resource perspective, they can't survive if they have to do full investigations for every complaint. Multiple representatives discussed how they often have short documentation that they use when a grower or complainant does not agree to a full investigation, so there is documentation.

EPA requested that Michigan expand on the anonymous grower survey mentioned.

The representative from Michigan explained that they want to send out inspectors and document damage, but they don't have the resources to do that and are concerned that the department would be flooded with requests to come document. Instead, there is interest in doing an anonymous survey to get a better sense of what's going on in the fields and what people will share when they don't need to identify themselves. They anticipate having 12 questions including how many acres, why aren't you filing a full complaint, what was your damage, are you near soy or corn (some experts think it make be legal corn applications impacting soybeans). It's not ideal but depending on what they learn this year, there may be a way to set up documentation of damage without doing a full investigation, so it can be handled differently in the future. They anticipate running the survey for 6 weeks and publicizing as much as possible. They want to hear from homeowners too. For example, the representative has damage on wild grapes at home and there isn't a soybean field within half a mile.

EPA expressed interest in seeing those results and discussed a similar survey performed in the Midwest a few years ago that was very helpful. The representative from Michigan agreed to share the results of the survey and appreciated the Agency's enthusiasm and hoped it would help strengthen their argument for why the survey would be beneficial.

EPA requested information from Minnesota about if there was any difference in the number of incidents from the north and south portions of the state given that they used different location-based restrictions.

The representative from Minnesota shared that reports were about the same as in previous years with most complaints coming from the South. This year was the same with very few complaints in the North.

EPA requested more information from the several states who shared reports of post cutoff date applications. Are people willfully ignoring the cutoff date restriction, skipping the training, making up for late planting, or something else?

The representative from Nebraska stated that commercial applicators did the right thing and followed the cutoff date. With late planting and storms, many growers wanted an extension on application times, but the state said no. Since there's no restriction on sales with applicator license, the growers would spray it themselves. Almost all of the complaints were against private applicators, not commercial, and were reported by neighbors who didn't want to go forward with a full investigation. The representative from Minnesota stated that late planting was the issue there, and it was just a worthwhile risk for growers to spray beyond the cut off. However, they are still investigating their open cases. The representative from Iowa explained that late applications were due to late planting. Weather is a huge factor due to wind speed as well. The representative from Indiana agreed with the other states that they had many reports of late applications, all done by private applicators, but it was almost impossible to prove it was after the cut off date. Indiana always gets better commercial compliance than private compliance with reports of damage from private applicators being twice as common.

EPA requested information about how multiple states share that they were seeing higher than normal concentrations of dicamba in plant samples.

The representative from Arkansas doesn't have many of the samples sent out back yet, but there have been reports of dicamba resistant pigweed. Growers might be using higher rates to counteract that, but they don't know yet. Academics in the state are also considering this.

EPA noticed that several people said they had lower numbers this year and asked if this is actually a good year or just fatigue?

The representative from Arkansas stated that their numbers are still relatively high for a single pesticide and that feedback from the field indicates that there are more incidents than reported. The decrease in cases is likely due to fatigue and trying to get along with neighbors because field inspectors report high levels dicamba damage.

The representative from Iowa shared that while complaint numbers have gone down compared to last year, it is still more than a normal year pre-dicamba. Pre-2016, they typically received 80-120 a year, but now they receive over 300. This year with additional restrictions is only a 25% reduction from the previous year. The department cannot continue to support that number. The investigations are challenging and exhausting to do. People don't feel listened to. There is value in going out and responding to growers to get the documentation so they can use it later, despite the challenges. Multiple states expressed agreement with the representatives from Arkansas and Iowa.

EPA has heard reports of people having more discussion around residential incidents and inquires if that is happening more this year.

The representative from Arkansas explained that the cases are high in soybeans, but they do get a lot of calls about residential trees and gardens. People don't always know who to call or what the damage is from, and they want to know if it's safe to eat. There is an added difficulty that some dicamba damage in homeowner areas looks like general auxins exposure, e.g. in tomatoes. It's so much easier to see symptomology in soybeans, so that can be a big factor in why the soybean cases are reported more often.

The representative from Indiana shared that they had seen more ornamental complaints in early season pre-plant burndown because that's when ornamental species are most susceptible. This year there were more complaints, so timing is an issue for in Indiana, but that isn't dicamba specific. The representative from Georgia highlighted one complaint from this year that was damage to fruit trees on a residential property, and that applicator had not had the annual training. The representative from North Carolina had heard rumors from university researchers of a big drift case that might be reported related to 2,4-d but never got any calls with complaints.

EPA has heard anecdotally that numbers of acres planted with dicamba tolerant beans are going up. State representatives agreed to share the planting numbers collected by the university if they have them.

EPA asked if preemergent applications are simultaneous with planting or before. The representative from Arkansas stated that applications before planting (burndown) not an issue because still cool at that time.

EPA requested additional information on defensive planting. The representative from Arkansas shared that most acreage in Arkansas is dicamba tolerant seed. While some say they are planting defensively and do not actually use dicamba, the department does not have a good number to reflect how accurate that is. The representative from Nebraska agreed that quite a few will say that they are planting defensively, but there's no reporting of what people plant. Early conversations about the availability of products are a big factor when choosing what seeds to plant.

The representative from Tennessee stated that there are approximately 1.8 million acres of soybeans in Tennessee, of which about 92-98% is Xtend. Some growers are planting defensively and may not apply dicamba but it is likely those growers are not under extreme weed pressure. There are approximately 320,000 acres of cotton in Tennessee, of which 95% is Xtend. Middle Tennessee is 75% Enlist, so they're not sure if the retailers in that area are pushing Enlist more because they do custom applications and don't spray dicamba. Around some counties with nurseries, they will typically spray Enlist to protect the nurseries. This is all a change from last year.

The representative from Indiana said that their growers aren't contending with cotton, but a lot of growers are switching to Enlist or E3. Acreage is shifting from dicamba to 2,4-D and glufosinate. There was a discussion between representatives about whether the yields have increased with Enlist and that some growers are waiting to see the data before they make a change from Xtend to Enlist.

EPA asked the Dakotas about last year's incident numbers being very high and if there were any other reasons beyond mid-season rain that were very helpful. The representative from North Dakota stated that there was plenty of damage out there, but late planting and cooler weather helped some.

EPA reiterated that the registration review draft risk assessment for dicamba will be coming out soon and that the Agency values their comments and feedback on that document.